

Pending Claims

Listing of Claims:

Claims 1-11. (Cancelled)

Claim 12. (Withdrawn): A method for identifying a compound that regulates an HL promoter through an estrogen receptor, which method comprises detecting a change in the level of expression of a reporter gene in an assay system of claim 40 contacted with a test compound, wherein detection of a change in the level of expression of the reporter gene indicates that the test compound regulates the HL promoter through the estrogen receptor.

Claim 13. (Withdrawn): The method according to claim 12, wherein the test compound is an estrogen or an estrogen analog.

Claim 14. (Withdrawn): The method according to claim 12, wherein the level of reporter gene expression decreases when contacted with a test compound that regulates the HL promoter through the estrogen receptor.

Claim 15. (Withdrawn): The method according to claim 12, wherein the estrogen receptor is a human estrogen receptor.

Claim 16. (Withdrawn): The method according to claim 15, wherein the estrogen receptor is an ER α or an ER β .

Claim 17. (Withdrawn): The method according to claim 12, wherein the C/EBP transcription factor is selected from the group consisting of C/EBP α , C/EBP β , C/EBP γ , C/EBP δ , and C/EBP ϵ .

Claim 18. (Withdrawn): The method according to claim 1, wherein the HL promoter is positioned proximal to the 5' end of the human HL coding region.

Claim 19. (Withdrawn): The method according to claim 18, wherein the HL promoter is the human HL promoter region from -1557 to +43, relative to the HL coding region start site.

Claim 20. (Withdrawn): The method according to claim 12, wherein the reporter gene encodes a protein selected from the group consisting of luciferase, green fluorescent protein, yellow fluorescent protein, β -galactosidase, chloramphenicol transferase, horseradish peroxidase, and alkaline phosphatase.

Claim 21. (Withdrawn): The method according to claim 20, wherein the reporter gene is luciferase.

Claim 22. (Withdrawn): The method according to claim 12, wherein the cell is selected from the group consisting of a yeast cell, an insect cell, and a mammalian cell.

Claim 23. (Withdrawn): The method according to claim 22, wherein the cell is selected from the group consisting of a HepG2 cell, COS, CHO, MDCK, Hela, 3T3, and primary cells.

Claim 24. (Withdrawn): The method according to claim 12, wherein the compound decreases the level of expression of the reporter gene through the estrogen receptor.

Claim 25. (Cancelled)

Claim 26. (Previously presented): An isolated cell comprising

- (i) a first exogenous nucleic acid molecule which encodes an estrogen receptor;
- (ii) a second exogenous nucleic acid molecule which encodes a CCAAT/enhancer-binding protein (C/EBP) transcription factor; and
- (iii) a reporter gene operatively associated with a hepatic lipase (HL) promoter.

Claim 27. (Previously presented): The cell of claim 26, wherein the estrogen receptor is a human estrogen receptor.

Claim 28. (Previously presented): The cell of claim 27, wherein the estrogen receptor is an ER α or an ER β .

Claim 29. (Previously presented): The cell of claim 26, wherein the C/EBP transcription factor is selected from the group consisting of C/EBP α , C/EBP β , C/EBP γ , C/EBP δ , and C/EBP ϵ .

Claim 30. (Previously presented): The cell of claim 26, wherein the estrogen receptor, the C/EBP transcription factor, and the reporter gene operatively associated with a hepatic lipase promoter are expressed from separate vectors or the same vector.

Claim 31. (Previously presented): The cell of claim 26, wherein the hepatic lipase promoter is positioned proximal to the 5' end of human hepatic lipase coding region.

Claim 32. (Previously presented): The cell of claim 26, wherein the hepatic lipase promoter comprises the human hepatic lipase promoter region from -1557 to +43, relative to the human hepatic lipase coding region start site.

Claim 33. (Previously presented): The cell of claim 26, wherein the reporter gene encodes a protein selected from the group consisting of luciferase, green fluorescent protein, yellow fluorescent protein, β -galactosidase, chloramphenicol transferase, horseradish peroxidase, and alkaline phosphatase.

Claim 34. (Previously presented): The cell of claim 33, wherein the reporter gene is luciferase.

Claim 35. (Previously presented): The cell of claim 26, wherein the cell is selected from the group consisting of a yeast cell, an insect cell, and a mammalian cell.

Claim 36. (Previously presented): The mammalian cell of claim 35, wherein the cell is selected from the group consisting of a human cell, a rat cell, a monkey cell, a dog cell, and a hamster cell.

Claim 37. (Previously presented): The cell of claim 26, wherein the cell is selected from the group consisting of HepG2, COS, CHO, MDCK, Hela, 3T3, and primary cells.

Claim 38. (Previously presented): The cell of claim 26, wherein the first exogenous nucleic acid molecule is inserted into an expression vector.

Claim 39. (Previously presented): The cell of claim 38, wherein the expression vector is selected from the group consisting of pCR1, pBR322, pMal-C2, pET, pGEX, pMB9, RP4, pYES2, pYESHisA, pYESHisB, pYES HisC, pcDNA3, and viral vectors.

Claim 40. (Previously presented): An assay system for compounds that modulate hepatic lipase promoter activity comprising a population of cells of claim 26, wherein the number of cells in a single assay system is sufficient to express a detectable amount of the protein encoded by the reporter gene under conditions of maximum reporter gene expression.

Claim 41. (Previously presented): The cell of claim 26, wherein the cell is a hepatocarcinoma cell.

Claim 42. (Previously presented): The cell of claim 26, wherein the second exogenous nucleic acid molecule is inserted into an expression vector.